

Searching for Planning-related Documents Pre- and Post-Flood

Housing Needs Assessment Model: Has Housing Recovered in Iowa Communities After the Floods of 2008?

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Objective and Strategy

- What planning-related documents were in place before and after the 2008 flood event?
- Internet searches, and contacting staff from city halls and COGs yielded a variety of planning documents, ordinances and reports dating from before the event to the post-flood recovery period through April 2011
- Documents guided disaster planning, housing issues, housing codes, zoning and land use, hazard mitigation and comprehensive community planning in each city

Objective and Strategy

- A total of 63 documents were reviewed as part of this documentary analysis
 1. Code of Ordinances
 2. Zoning
 3. Housing-related Plans
 4. Hazard Mitigation Plans
 5. Flood-related Plans and Projects

Code of Ordinances

National Flood Insurance Program (NFIP) benefits:

- Floodplain mapping (Flood Insurance Rate Maps - FIRM)
- Receive insurance to facilitate the financial impact of flooding
- Model ordinance : planning documentation and implementation support
- All communities are members; all communities use FIRM

FEMA Model Ordinance: four flood districts

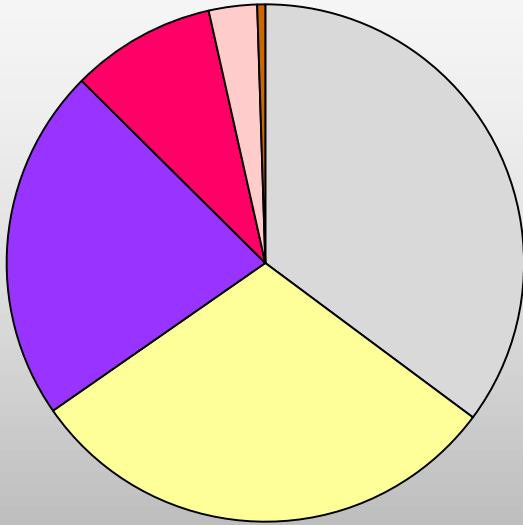
1. Floodway District
2. Floodway Fringe
3. General Flood Plain District
4. Shallow Flooding District

Codes of Ordinance

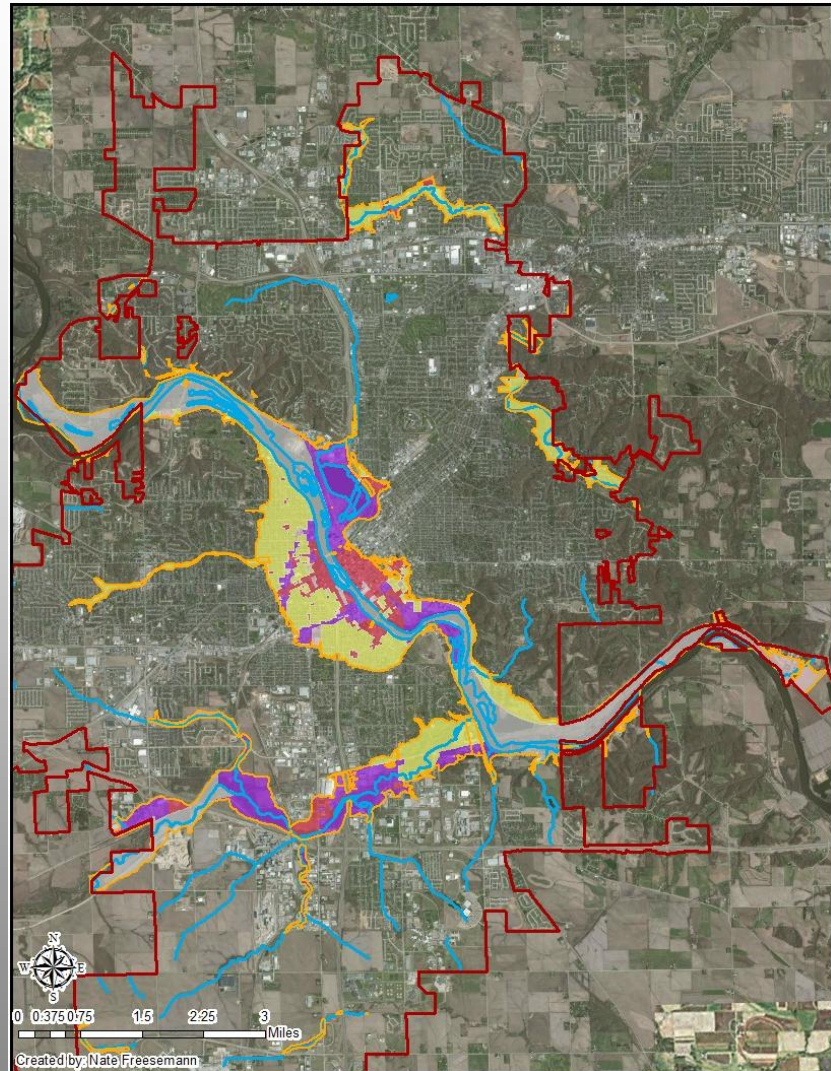
Community	Last Update	Four Zone Ordinance	Additional Permitting Process
Cedar Rapids	2010	No	Yes
Columbus Junction	2007	No	No
Coralville	2011	Yes	Yes
Iowa City	2008	No	Yes
Mason City	2010	Yes	No
Waterloo	2007	Yes	Yes
Waverly	2010	Yes	Yes

- Additional permitting process: whether or not the community uses an additional permit to develop within flood zones

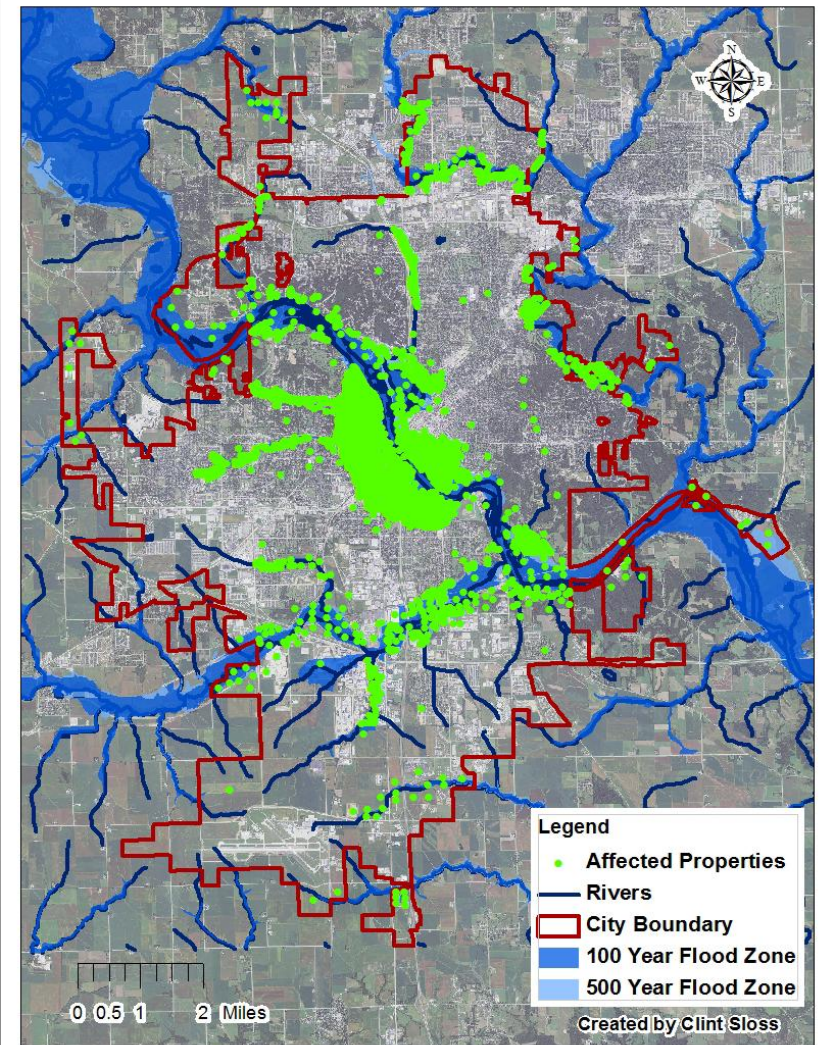
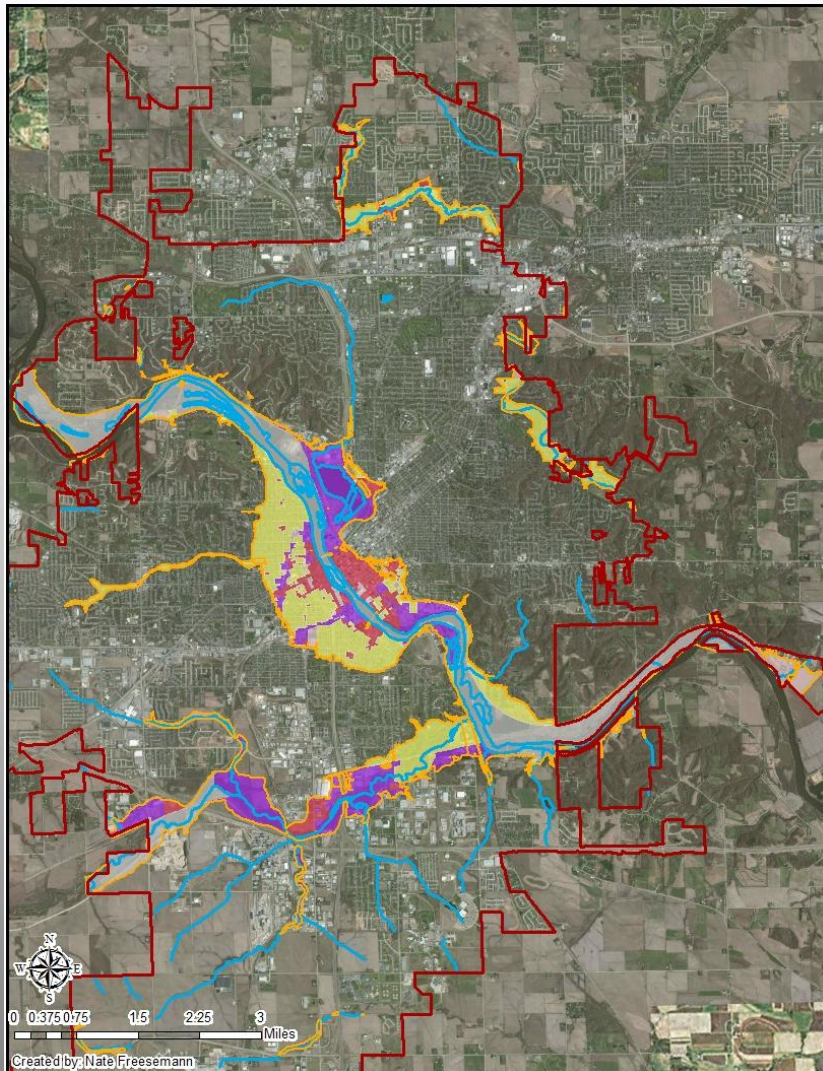
Cedar Rapids - Zoning



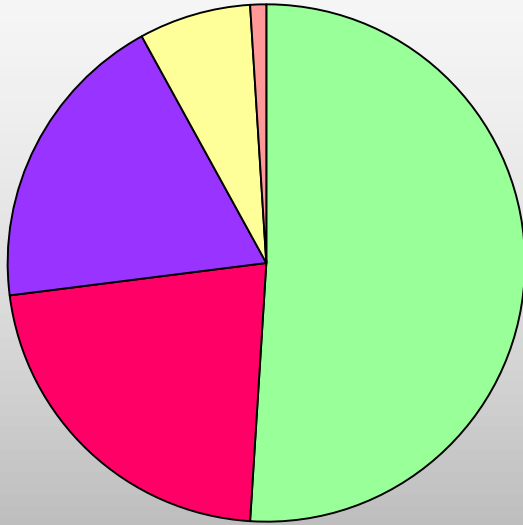
Zoning	Percent
Agricultural	35%
Residential	30%
Industrial	22%
Commercial	9%
Public	3%
Airport	<1%



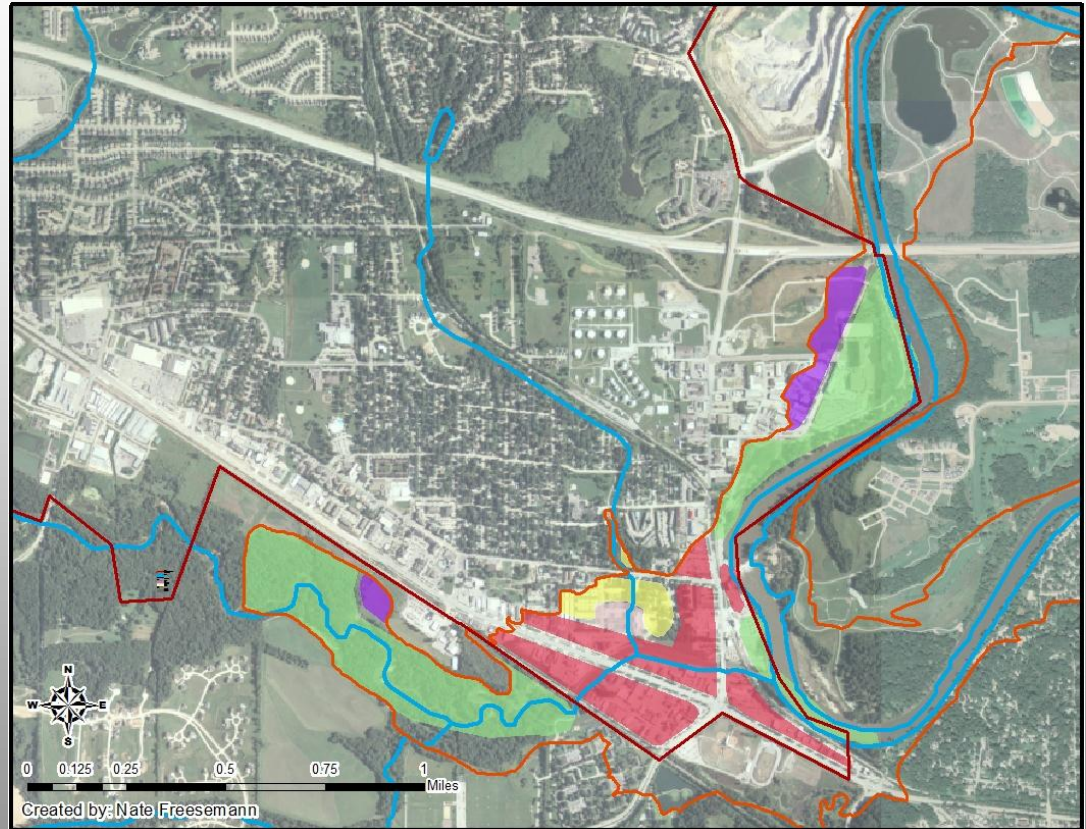
Cedar Rapids



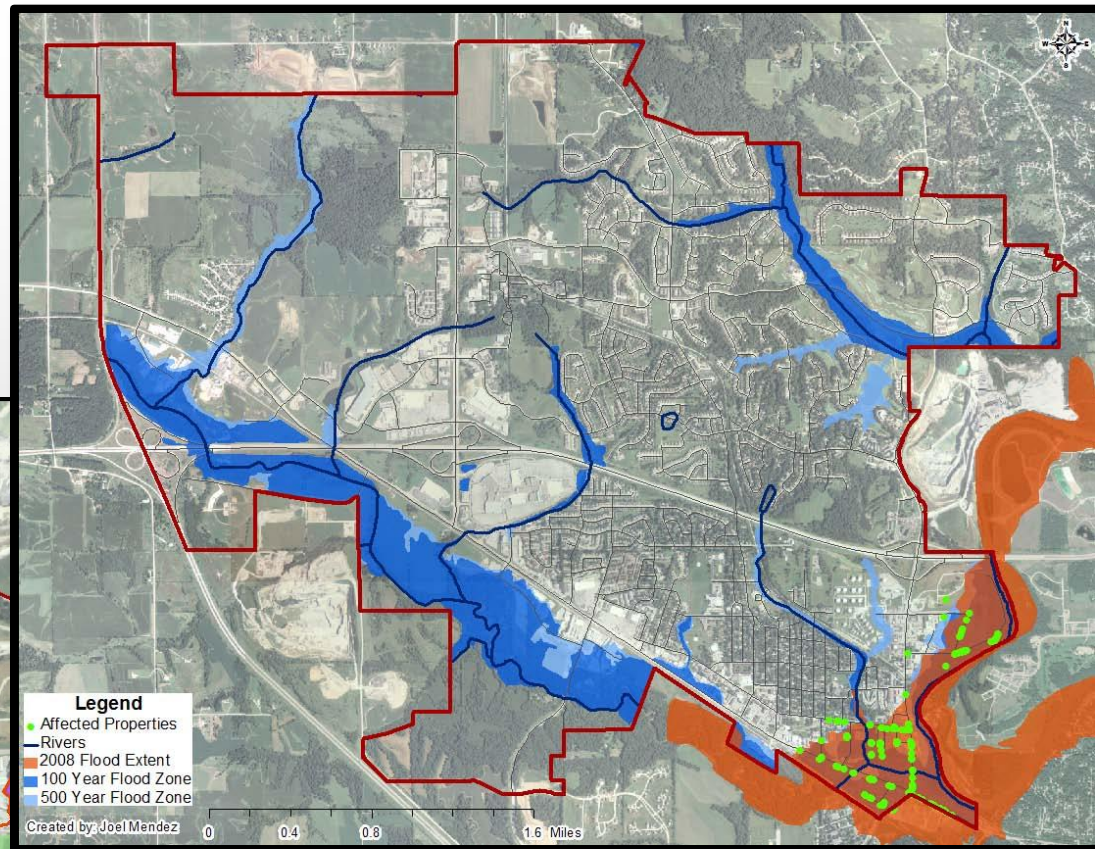
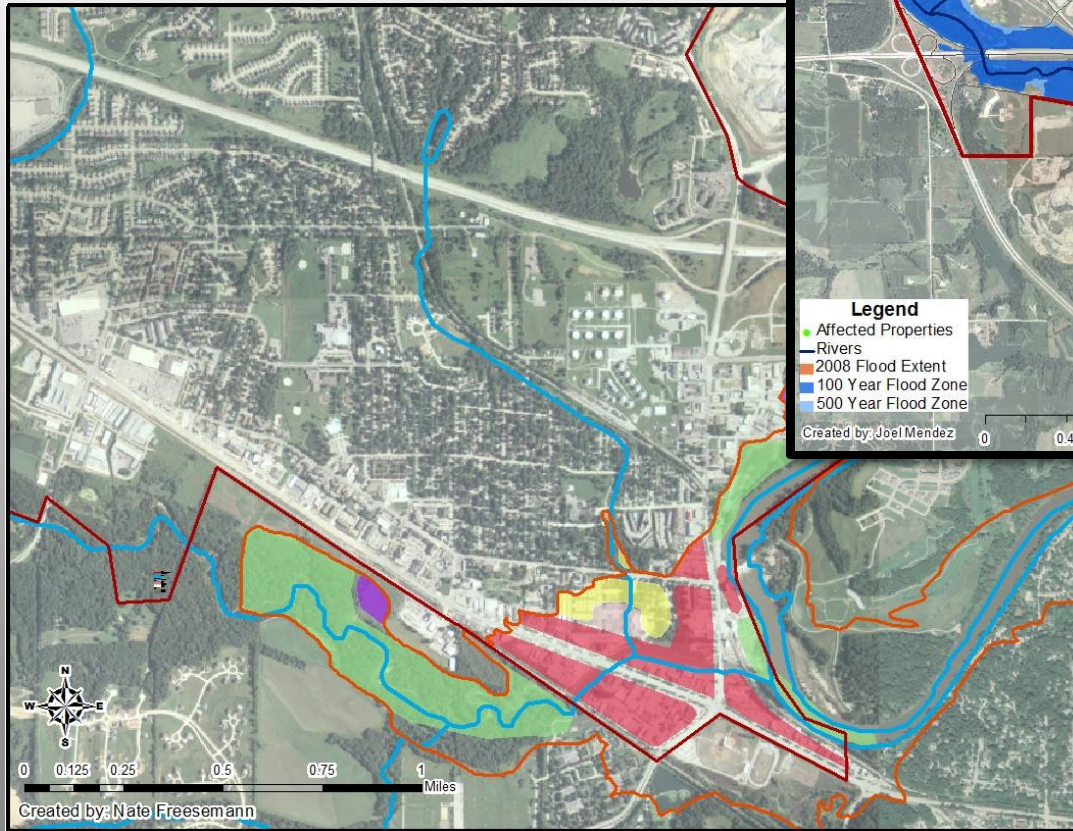
Coralville - Zoning



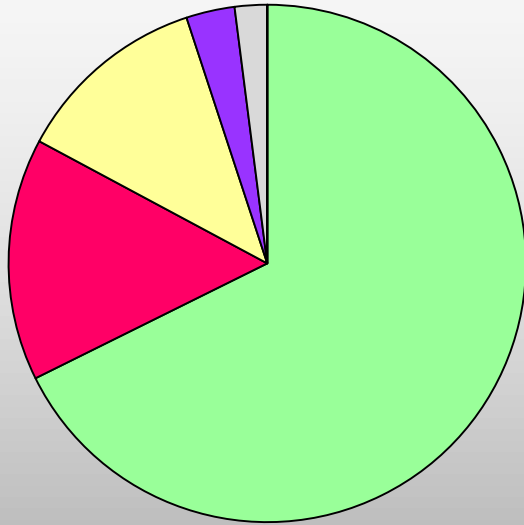
Zoning	Percent
Parks/Open Space	51%
Commercial	22%
Industrial	19%
Residential	7%
Public/Civic/Gov.	1%



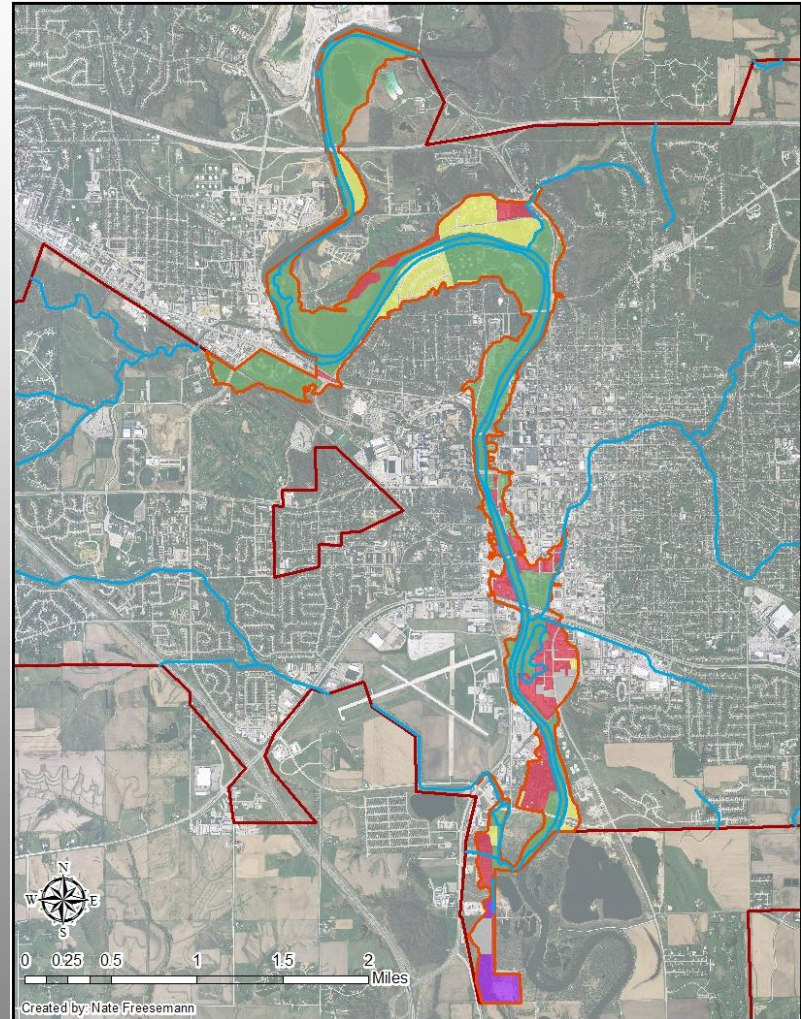
Coralville



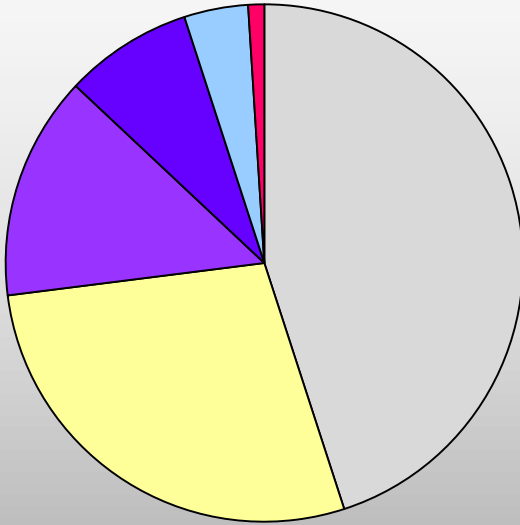
Iowa City - Zoning



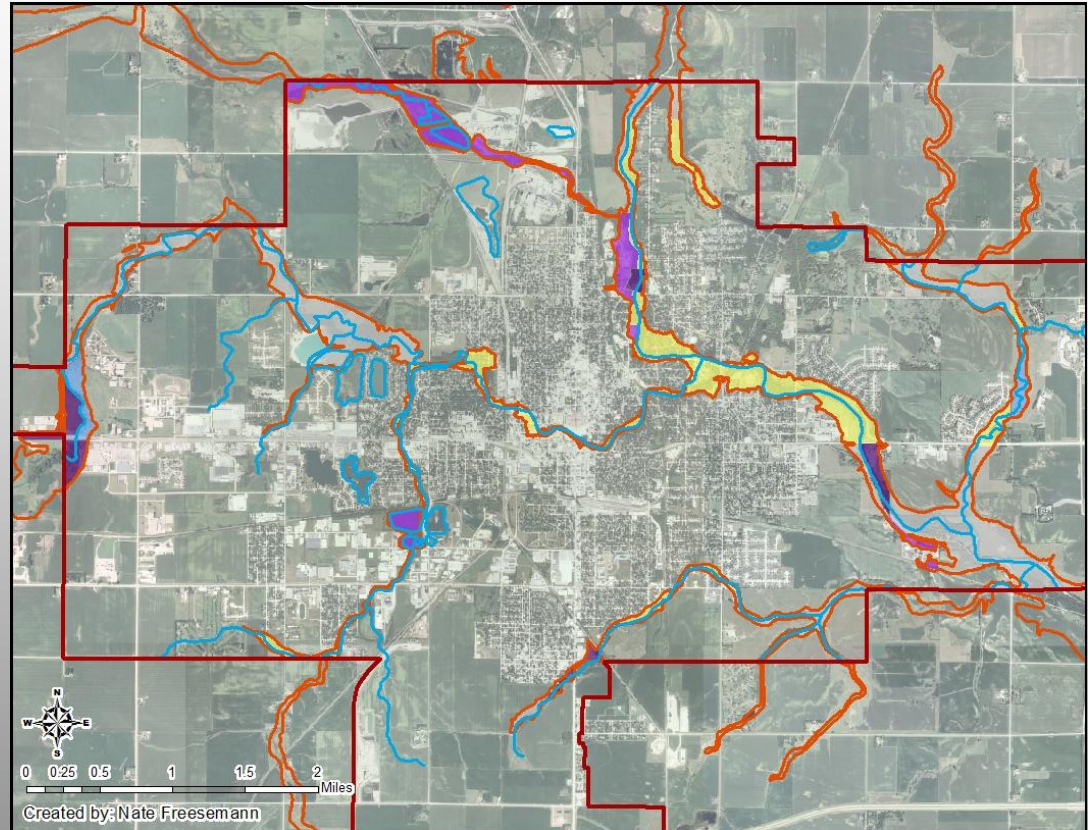
Zoning	Percent
Parks/Open/Rec.	67%
Commercial	15%
Residential	12%
Industrial	3%
Agricultural	2%



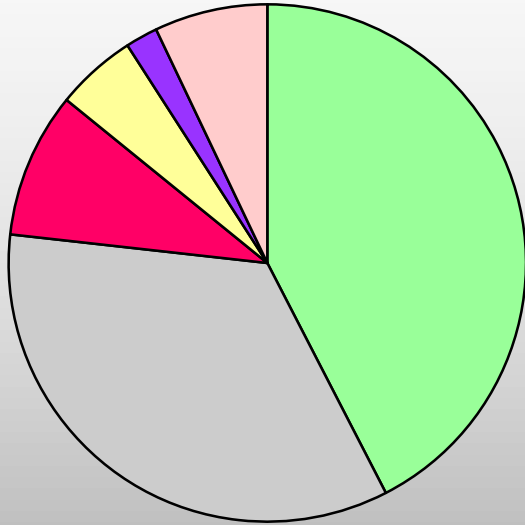
Mason City - Zoning



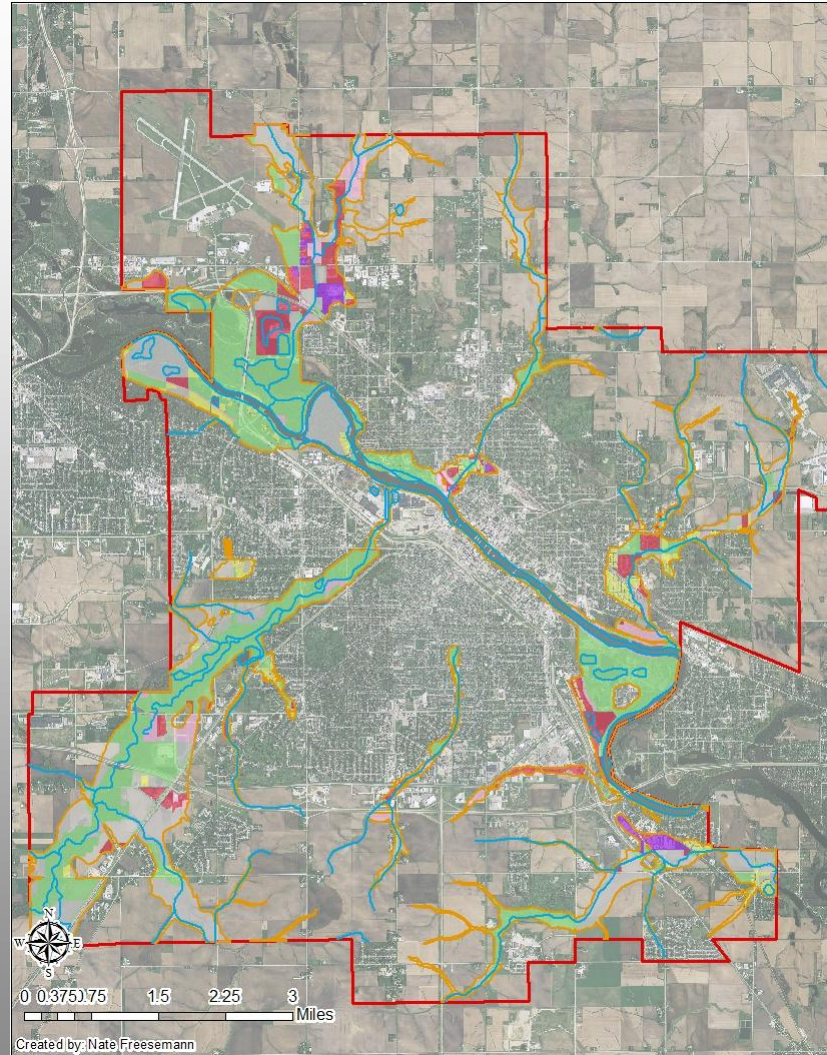
Zoning	Percent
Agricultural	45%
Residential	28%
Industrial	14%
Multi-Use	8%
Specific Use	4%
Commercial	<1%



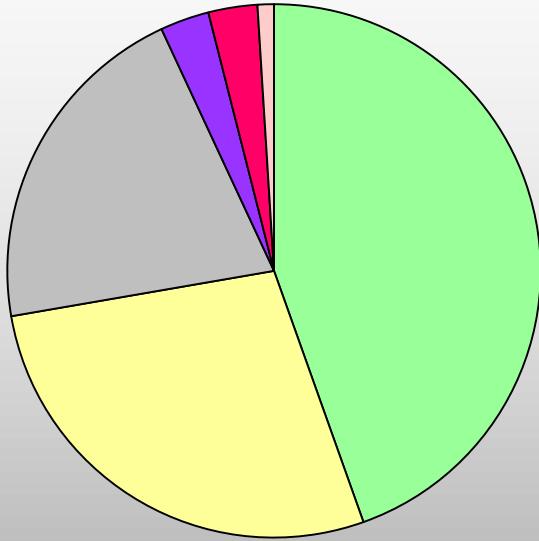
Waterloo - Zoning



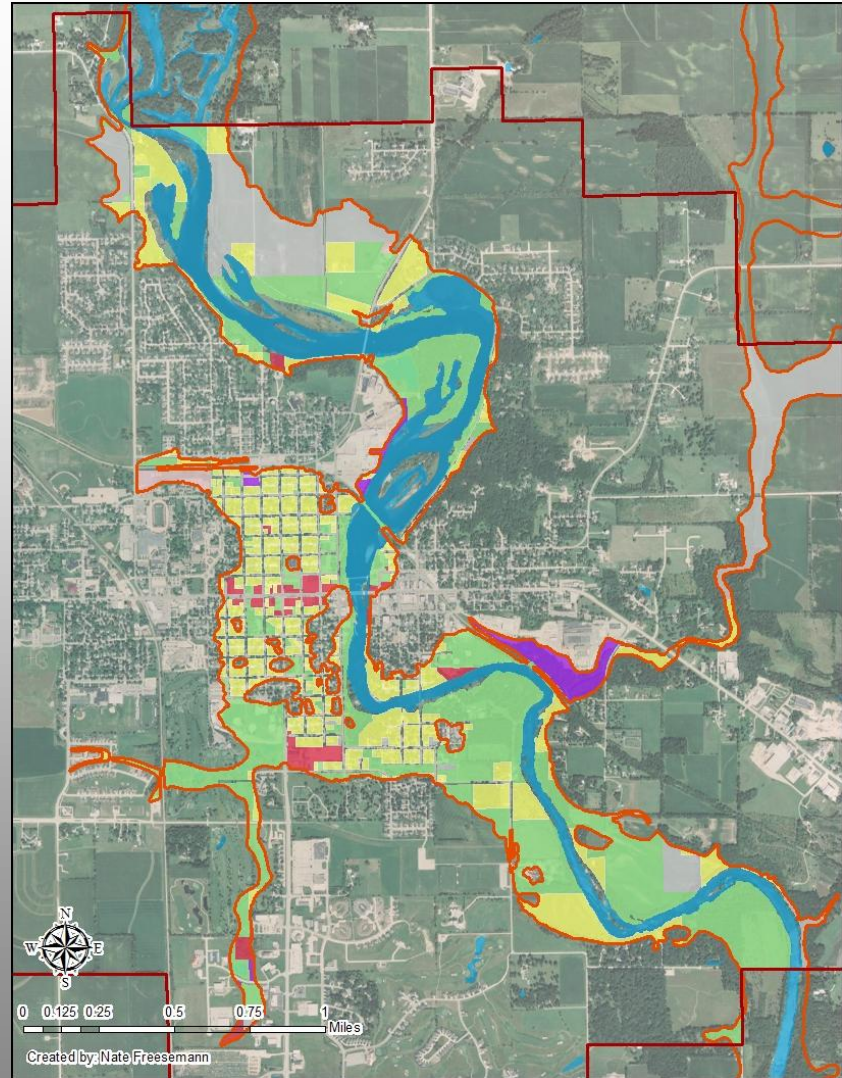
Zoning	Percent
Parks/Open Space	42%
Agricultural	34%
Commercial	9%
Residential	5%
Industrial	2%
No Data	7%



Waverly - Zoning



Zoning	Percent
Parks/Open Space	45%
Residential	28%
Agricultural	21%
Industrial	3%
Commercial	3%
Public/Civic/Gov.	1%



Zoning Summary

Zone	Cedar Rapids	Coralville	Iowa City	Mason City	Waterloo	Waverly
Agricultural	35%	0	2%	45%	34%	21%
Commercial	9%	22%	15%	<1%	9%	3%
Industrial	22%	19%	3%	14%	2%	3%
Residential	30%	7%	12%	28%	5%	28%
Parks/Open Space	0	51%	67%	0	42%	45%
Public/Civic/Gov.	3%	1%	0	0	0	1%
Multi-Use	0	0	0	8%	0	0
Specific Use	0	0	0	4%	0	0
Other	<1%	0	0	0	0	0
Unclassified	0	0	0	0	7%	0

Community	Housing-related Plans
Cedar Rapids	2009 Updated Current Housing Market Conditions and Calculations of Housing Demand
	2010 Evaluation of Market Factors and Development Parameters for MNFC-2 Proposals for Rental Housing
Iowa City	2007 Affordable Housing Market Analysis
	2006-2010; 2011-2015 Consolidation Plans
	2011 Iowa City Affordable Housing Model
Mason City	2005 Housing Needs Assessment Plan & Action Plan
Waterloo	2010-2014 Consolidated Plan: Waterloo/Cedar Falls HOME consortium
	2010 Annual Plan
	FY 2011 Consolidated Plan One-Year Action Plan
	2009 Analysis of Impediment Fair Housing
Coralville	No plans found
Columbus Junction	
Waverly	

Housing Related Plans

Cedar Rapids: the 2010 evaluation of the market factors for rental housing contained two recommendations:

1. The City should focus on assisting the development of housing that replaces lost housing in the urban core neighborhoods and in the downtown
2. The city should require that 15% to 20% of the units in buildings of 12 units or more should be targeted to households earning no more than 50% of the area median income

Housing Related Plans

Iowa City: In the 2007 Affordable Housing Market Analysis discusses housing demand for the city, and some recommendations.

1. The total affordable housing demand for 2000-2012 was calculated to be 5,450. The total affordable housing supply for 2000-2007 was 2,711. Therefore the total affordable housing need for 2007-2012 is 2,730 units.
2. The City wants to “change the perception of multi-family housing. Multi-family housing at street intersection and in transition areas between residential and non-residential uses can be very beneficial”

Hazard Mitigation Plans (HMP)

Community	Pre-Flood 2008	Post-Flood 2008
Cedar Rapids	2007 Cedar Rapids Metro-Area Hazard Mitigation Plan	No updates
Columbus Junction	2007 Louisa County Pre Disaster Mitigation Plan	No updates
Coralville	Title not found	2009 Coralville Hazard Mitigation Plan
Iowa City	Title not found	2010 Iowa City Hazard Mitigation Plan
Mason City	2006 Mason City Pre-Disaster Mitigation Plan	No updates
Waterloo	2003 Waterloo Hazard Mitigation Plan	2009 Waterloo Hazard Mitigation Plan
Waverly	Title not found	2009 City of Waverly Hazard Mitigation Plan

Cedar Rapids HMP

1. Minimize injuries and loss of life
2. Reduce or eliminate damages due to natural and man-made disasters
3. Manage response operations with or without County, State, and Federal Assistance
4. Return to pre-disaster conditions in a timely and pre-planned manner
 - Study the feasibility of constructing and maintaining floodwalls or levies

Related Goals: 1 & 2

Category: Technical

- Consider the installation of flood warning devices

Related Goals: 2

Category: Political

Iowa City HMP

1. Protect existing properties within the City of Iowa City
2. Protect the health and safety of the residents
3. Improve the quality of life in Iowa City
4. Ensure that public funds are used in the most efficient manner

- Acquisition of Flood-prone Structures

Benefit: High

Cost: High

Funding: City / Grants (HMA, PDM, HMGP, CDBG)

Agency: Planning

Timeline: 6-24 months

Notes: Provides complete protection against future flood damage and has identified grant opportunities

Flood-related Plans and Projects

- Every community in this study participated in a buyout program funded through FEMA
- The vast majority of the properties were residential
- Properties that are purchased using FEMA funds are under regulations
- Demolition of all existing structures and pavements, water and sewer connections be removed, landscape the property to a natural look, and the property can only be used as green space
- Some cities may wish to "rent out" these properties to neighboring houses as lawn space to help cover the cost of maintenance (Community Gardens)

Community	Buy-Outs
Cedar Rapids	1,413
Coralville	49
Iowa City	57
Mason City	158
Waterloo	48
Waverly	69
TOTAL	1,794

Flood-related Plans and Projects

- **Coralville** has been divided into regions, which have their own detailed recommendations for flood protection
- This regional approach allows citizens to quickly find information on flood mitigation on a neighborhood level (2009)
- **Iowa City** City River Corridor Flood Protection Options Plan prioritizes the neighborhoods of Parkview Terrace and Idyllwil (2009)
- It identifies options for flood protection in both neighborhoods, prioritized based on cost benefit analysis

Flood-related Plans and Projects

- **Mason City:** The historical and architectural Reconnaissance Survey for 2008 Flood Projects detailed many homes affected by the flood
- The focus of this survey was to establish which homes should be targeted by Historical Preservation
- Some of the homes in this study are approaching 100 years old
- **Waterloo** holds a Consortium with Cedar Falls so that both communities become eligible for federal funding through the Waterloo-Cedar Falls HOME Consortium's Community Development Block Grant (2010)

Flood-related Plans and Projects

- **Waverly** is removing an aging concrete dam with an inflatable dam (4 million, 3million federal 1 million state)
- The inflatable dam can be raised and lowered, giving the city further protection from flooding both upstream and downstream of the dam
- The dam is projected to protect approximately 300 properties from any future flooding (2009)



Conclusion

- There was a reaction, after the flood, by most communities to develop new planning strategies and update older plans
- The FEMA buyout will contribute to increase of open space in floodplains; however communities -- when thinking about their future zoning -- should try to increase open space as well, to limit overall development in flood zones
- Communities should develop housing-specific plans to better understand their needs

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